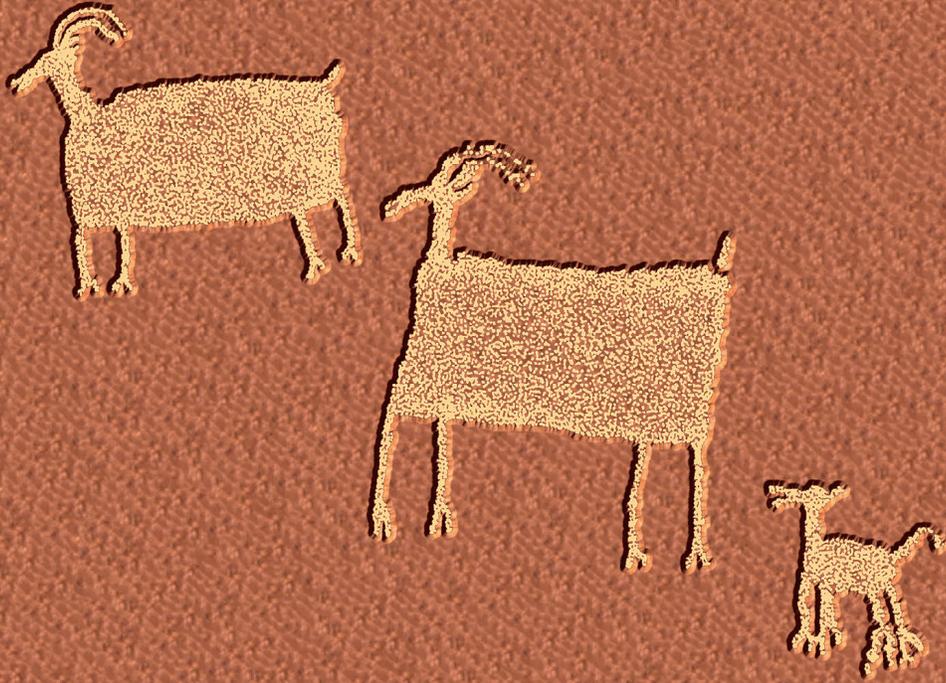


PROGRAM
&
ABSTRACTS



ARARA 2012

St. George, Utah



2012 Conference Program Issue
Volume 38, Number 2

La Pintura

Welcome to St. George

39th Annual ARARA Conference, 2012

WE ARE PLEASED this year to be in St. George, Utah, over this Memorial Day weekend, May 25-28, 2012, for the 39th Annual Conference of the American Rock Art Research Association at the Lexington Hotel and Convention Center. It is exciting to be holding our meeting in Utah, where we will be given an opportunity to experience Southwestern Utah Archaic, Basketmaker, Fremont, Ancestral Puebloan, and Paiute rock art.

St. George is one hour from Zion National Park, three hours from Bryce Canyon National Park, three hours from the North Rim of the Grand Canyon, and four hours from Grand Staircase Escalante National Monument with its red rock canyons, rock art, and ruins.

The Saturday and Sunday sessions of research papers and site reports and interesting topics will be presented in the 36 papers scheduled, and our Banquet speaker Don Christensen will present "One Thousand Sites and Counting: Reflections on Rock Art Research.

Be sure to visit the Vendor Room with its unusual selection of great items for sale, and join in the always lively bidding for treasures in our annual Auction.

Field trips will be rewarding and the weather in southwestern Utah will be glorious. I am looking forward to seeing you all in St. George this year.

—Ron Smith, ARARA President

A SPECIAL CORPS OF VOLUNTEERS comes forward each year to assume the often herculean tasks of organizing the Annual Conference. Please take time to thank your fellow members who have donated their time and talents to make this Conference a special gathering.

- Local Hosts: John Mangels and the Dixie Archaeology Society
- Local Volunteers: Mark Nilsson, Susannah Nilsson, Karen Mosen, Marilyn Macumber, Susan Harty, Marie Langness, Mel Langness, Susan Javery, Rich Cline, Dave Ritch, Chris Oravec, Barbara Bergman, Joan Mangels, John Mangels, and Jeff Allen
- Field Trip Coordinators: Jeff Allen and Jennifer Huang
- Membership and Registrar: Donna Yoder and Jane Kolber, Sandi Riggs, Carol Bury

- Audio/Visual: Sandy Rogers and Daniel McCarthy
- Children's Art Workshop and Poster Note Cards: Barbara Bergman, Susannah Nilsson, Sandra Sandberg, Nina Bowen
- Auction Coordinator: Shelley Rasmussen, Barbara Grone-mann, Trudy Mertens, Linda Dorsey, Glenda Simmons and Julie Michler
- Auctioneers: Dell Crandall and Larry Evans
- Program Chairs: Carol Ormsbee and Steve Schwartz
- Vendor Room: Marglyph Berrier and Anne Carter
- Conference Program Layout and Book Transportation: Ken Hedges
- Awards: Janet Lever-Wood and many anonymous reviewers.
- T-Shirt Design: Chris Gralapp and Paula Reynosa, Kat and Boma Johnson (photo)
- Flute Players: Zion Flute Circle
- Blessing: Benn Pikyavit, Tribal Elder of the Southern Paiutes
- Publications Sales and Mailing: Jim Keyser and the Board of Directors
- AIRA Vol. 38 Editors: Eric Ritter and Melissa Greer, Volume Coordinator Peggy Whitehead
- Public Lecture: Breen Murray
- Banquet Speaker: Don Christensen
- Field Trip Leaders: Jeff Allen, Rich Cline, Joe Brame, Anne Carter, Anne McConnell, Keith Rhea, Sandra Sandberg, John Mangels, Mel Langness, Jeff Feldman, Penny Feldman, Lois Mansfield, Garth Norman, Nina Bowen, Troy Scotter, Boma Johnson, Mark Nilsson, Paula Reynosa, John Macumber, Marilyn Macumber, Feather Robinson, Jerry Gilmore, Susannah Nilsson, Ron Greenlee, Nal Morris, John Ciardi, and Elaine Holmes
- BLM: Dawna Ferris-Rowley and William Banek of the St. George Field Office
- Property Owners for Field Trips: Dorothy and Gordon Zitting
- Volunteer Coordinator: Priscilla Murr
- Volunteers: Agnes Walker, Del Crandall, Larry and Iris Evans, Leroy Unglaub, and John Yard
- ARARA Online: Carol Garner
- Davi Marie Gadd, Lexington Hotel & Conference Center
- Conference Coordinator: Donna Gillette
- ARARA President: Ron Smith



The 2012 ARARA Conference Logo

Our logo for the 2012 Conference is from a panel at Anasazi Ridge. This site is located in Santa Clara Canyon, west of St. George and Ivins, Utah, at a general location known as Land's End to the BLM. Nearby are several Virgin Anasazi villages and their fields along the river bottom. The panel features two fine bighorn sheep and a small animal interpreted by traditional consultants as a coyote singing or speaking. Photograph by John Mangels, courtesy Dixie Archaeology Society.

ARARA 2012 Conference Program

Lexington Hotel and Conference Center, St. George, Utah

Wednesday, May 23, 2012

10:30 a.m. IFRAO Meeting – The Board Room

Thursday, May 24, 2012

8:00 a.m. – 5:00 p.m. Board Meeting – The Board Room

4:00 – 6:30 p.m. Conference Registration –Lobby

5:00 p.m. Required Meeting for Friday Field Trip participants – Lobby

5:15 – 6:30 p.m. Get Together – Sabra A, B, C, D

No-host Bar and Snacks

6:45 – 8:45 p.m. Public Lecture by Breen Murray:

“The Mexican Rock Art Connection”: A Broad Survey of Several Mexican Rock Art Sites in Different Settings and Regions of the Country

Event Tent

Friday, May 25, 2012

All day Field Trips – meeting times and places to be announced

1:00 – 5:30 p.m. Registration – Lobby

6:00 – 8 :00 p.m. Reception – Sabra A, B, C, D

Entertainment by The Zion Flute Circle – No-host Bar

8:30 – 9:30 p.m. Auction items may be delivered to the Auction Committee – Vendor Room, Sabra E, F, G

8:30 – 9:30 p.m. Vendor Room Setup – Sabra E, F, G

8:30 – 9:30 p.m. Poster set up – Sabra E, F, G

8:30 – 10:00 p.m. Presenters bring presentations to AV Coordinator Sandy Rogers – Sabra A, B, C, D

Saturday Morning, May 26, 2012

6:30 – 8:30 a.m. Vendors and Poster Room Set Up – Sabra E, F, G

Posters will be set up at the beginning of the meeting and left until Sunday afternoon.

Authors will be at the posters 11:30 a.m. – 12:30 p.m. Saturday

7:30 – 8:30 a.m. Publication Committee Meeting –Mezzanine

7:30 – 8:30 a.m. Conservation Committee Meeting – The Board Room

7:30– 8:30 a.m. Vendor Room Open – Sabra E, F, G (also open during breaks, lunch, and until 6 p.m.)

Auction items accepted in the Vendor Room when open.

8:00 a.m. – 5:00 p.m. Registration – Sabra A, B, C, D

8:30 a.m. Welcome and Announcements – Sabra A, B, C, D

Ron Smith, ARARA President

Blessing to be given by Benn Pikyavit, a Tribal Elder of the Southern Paiutes and a member of the Kaibab Band

John Mangels, local host, Dixie Archaeology Society

8:40 a.m. Session 1: Local Rock Art

(Announcements and introductions: Ron Smith)

Boma Johnson: Rock Art of the St. George Basin, Southwest Utah: An Overview

Don D. Christensen: A Preliminary Assessment of Rock Art in Washington County, Utah

Carolynne Merrell: Exploring the Cave Valley Style, Utah

V. Garth Norman: Parowan Gap Narrows Rock Writing as History: Interpretation in Archaeology District Contexts

10:10 a.m.

BREAK

Vendor Room Open – Sabra E, F, G. Auction items may be dropped off until 1:30 p.m.

10:40 a.m.

Session 2: Utah/Nevada

(Announcements and introductions: Ron Smith)

Janet Lever-Wood and Ann Phillips: Rock Art Recording at Upper Sand Island, Utah

Ruth Musser-Lopez: The Mountain North of Las Vegas: Rock Art Style Distribution on the Periphery of the Sheep Range

Scott McDonald: Multiple Use Paleoarchaic Sacred Sites, Pancake Range, East Central Nevada

11:30 a.m. – 12:30 p.m. Poster Presentations – Sabra E, F, G

Authors will be by their posters

Jon Picciuolo: Pictographs at Swordfish Cave (CA-SBA-503) Suggestive of Human-Swordfish Shamanistic Transformation

Farrel W. Lytle: Determining Age of Petroglyphs by XRF Chemical Analysis: Dated Petroglyph Frequency Tracks Climate Eras

V. Garth Norman: Parowan Gap Narrows Rock Writing as History: Interpretation in Archaeology District Contexts

Noon

LUNCH

Vendor Room Open

12:30 – 1:30 p.m.

Education Committee Meeting – The Board Room

Saturday Afternoon, May 26, 2012

1:30 p.m.

Session 3: Arizona

(Announcements and introductions: Ron Smith)

Scott Seibel: New Rock-Art Discoveries on Fajada Butte, Chaco Culture National Historical Park

Janine Hernbrode: Gender in Hohokam Imagery and Landscape: Sutherland Wash Rock Art District, Coronado National Forest, Arizona

Ken Hedges: Red Rock Canyon: Investigating the Sinagua Connection in Lower Gila Rock Art

Michael Terlep: A Multifaceted Analysis of Cup and Channel Petroglyphs from the Arizona Strip

3:00 p.m.

BREAK

Vendor Room Open – Sabra E, F, G

3:30 p.m.

Session 4: Techno Geeks

(Announcements and introductions: Ron Smith)

Jennifer Huang, Robert Mark, Evelyn Billo, and Jannie Loubser: Experimentation with iPad 2 Technology in Petroglyph Documentation at the Watson Site, Southeastern Oregon

Chris R. Loendorf and Lawrence L. Loendorf: Analyzing Red Pictographs with Portable X-ray Fluorescence

Amanda Castenada, Charles Koenig, Grant Stauffer, Carolyn Boyd, Karen Steelman, Jon Russ, and Marvin W. Rowe: Portable X-ray Spectroscopy Analysis of Rock Art Pigments in the Lower Pecos River Region

Elizabeth (Beth) Velliky: Rock Paintings of Squamish Valley: An Analysis of Pigments and Ochre Sources using Portable X-ray Fluorescence Spectrometry

Karen Steelman, Lennon N. Bates, and Carolyn E. Boyd: Radiocarbon Dating a Rock Painting from Black Cave, Texas

6:00 – 8:00 p.m. **AUCTION and NO HOST BAR** – Event Tent

Sunday Morning, May 27, 2012

7:00 – 8:00 a.m. **Website Committee Meeting** – The Board Room

7:30 – 8:00 a.m. **Vendor Room Open** – Sabra E, F, G

Posters will be left up until 3:00 p.m.

8:00 a.m. **Registration** – Sabra A, B, C, D

8:00 – 8:55 a.m. **BUSINESS MEETING** – Sabra A, B, C, D

All members welcome

9:00 a.m. **Session 5: Paradigms Galore**

(Announcements and introductions: Ron Smith)

Leanna Flaherty: The “Costliness” of Petroglyph Manufacture: An Experiment Conducted to Determine the Energy Expenditure of Rock Art Production and an Evaluation of its Potential as a “Signal”

Livio Dobrez and Patricia Dobrez: Canonical Form and the Identification of Rock Art Figures

Steven J. Waller: Illusions of the Supernatural: Archaeological Remnants of Pre-Scientific Paradigms Attempting to Explain Ambiguous Audio/Visual Phenomena in the Landscape

10:00 a.m. **BREAK**

Vendor Room Open – Sabra E, F, G

10:30 a.m. **Session 6: The Great Northwest**

(Announcements and introductions: Ron Smith)

Don Hann: Searching for the Story in Picture Gorge, Eastern Oregon

James D. Keyser, Livio Dobrez, Don Hann, and David A. Kaiser: When is a Picture a Narrative? Interpreting Different Types of Rock Art

Lawrence Loendorf: The Horned Headgear Site, Montana

Julia Altman: Warriors in Stone: A Study of the Shield Bearing Warrior Motif in Idaho Rock Art

Kathy Hamlet and Carolynne Merrell: Cowboys with Time on their Hands

Noon **LUNCH**

Vendor Room Open – Sabra E, F, G

Noon **Board Meeting (to include newly elected officers)** – To be announced

Sunday Afternoon, May 27, 2012

1:30 p.m. **Session 7: The Californias, North and South**

(Announcements and introductions: Ron Smith)

Steve Freers: Southern California Style—It’s Elemental

Alexander K. Rogers: Early Reports on the Coso Petroglyphs of Southern Inyo County, California

David Lee: A Decade of Documentation: Current Status of the Owens Valley Rock Art Project

Jon Harman: Abstract Pictograph Sites near Mission San Borja, Baja California

- Elanie Moore:** At Cueva Pintada, Baja California Sur, the Proof is in the Pole
Eve Ewing: Birds of Rain and Other Avian Forms in Great Mural Art of Baja California
- 3:00 p.m.** **BREAK**
Vendor Room Open
- 3:30 p.m.** **Session 8: Alternate Perspectives**
(Announcements and introductions: Ron Smith)
- Geri Schrab:** Addressing the Sacred: An Artistic Exploration of Rock Art
Bruce Ross: Traveling to Other Worlds: Visitation to the Heavens as Transpersonal Experience in Rock Art
John A. Ruskamp: Asiatic Echoes: The Identification of Chinese Pictograms in North American Rock Writing
Bill Whitehead: Why We Will Never Be Able to Interpret Rock Art or Anything Else For That Matter, Part 3
- 5:00 p.m.** **Required Meeting for Monday Field Trip Participants** – Lobby
- 5:00 p.m.** **No Host Bar** – Lobby
- 6:30 p.m.** **BANQUET** – Sabra A, B, C, D
Wellman Award for Distinguished Service: James Keyser
Bock Award for Extraordinary Achievement: Ann Phillips
Conservation and Preservation Award: City of Ivins, City of Santa Clara, BLM - St George Office
"Keepers of the Gate" Stewardship Award: Dorothy and Gordon Zitting
Oliver Photography Award: Dave Manley
- Banquet Speaker, Don D. Christensen:**
One Thousand Sites and Counting: Reflections on Rock Art Research
- Monday, May 28, 2012**
- All day** **Field Trips** – meeting times and places to be announced

2012 ARARA Conference Abstracts

Sorted Alphabetically by Author

Julia Altman (University of Idaho)

Warriors in Stone: A Study of the Shield Bearing Warrior Motif in Idaho Rock Art

Shield bearers have been illustrated and reported for many years as figures holding round shields in rock art throughout western North America. The distribution of shield warrior figures in Idaho is examined and its stylistic relationship to shield bearers in the adjacent Great Plains is established. Using a combination of field work, ethnographic research and searches of State Historic Preservation Office (SHPO) records, shield bearing warrior locations throughout Idaho were located, mapped and analyzed quantitatively, contextually and stylistically. (Paper)

Amanda Castenada, Charles Koenig, Grant Stauffer, Carolyn Boyd, Karen Steelman, Jon Russ, and Marvin W. Rowe (Texas A&M University and Conservation Laboratory of the Museum of New Mexico)

Portable X-ray Spectroscopy Analysis of Rock Art Pigments in the Lower Pecos River Region

Pictograph pigments from the Lower Pecos River, Texas were analyzed at 10 rock shelters. Red paintings from reddish-brown to dark purple are always iron-based. Hyman and Rowe (1997) found the only black pictograph in the region without manganese pigments until now. The present work found manganese was used as pigments in all Pecos River Style black pictographs. However, we found apparent charcoal in small paintings that are difficult to assign to the three accepted styles: Pecos River, Red Linear and Red Monochrome. (Paper)

Don D. Christensen (Western Rock Art Research)

A Preliminary Assessment of Rock Art in Washington County, Utah

Western Rock Art Research documented 49 prehistoric rock art sites in some of the newly designated wilderness areas in Washington County, Utah for the Bureau of Land Management. The St. George region is at the nexus of three major physiographic regions: the Mojave Desert, the Great Basin, and the Colorado Plateau. As such, the rock art reflects a number of different influences across a broad temporal spectrum within a diverse physical setting. The environmental context, the cultural associations and the stylistic affiliations of the sites will be described based on the work completed to date. (Paper)

Livio Dobrez and Patricia Dobrez (Australian National University)

Canonical Form and the Identification of Rock Art Figures

Is there a particular perceptual modality, i.e. a particular way of seeing rock art figures (anthropomorphs and zoomorphs) which simply involves basic recognition and is distinguishable from the recognition of these same figures in other contexts, e.g. scenes? Such a modality would depend on elements of a figure and of perception which make preliminary identification easy and rapid, for example visual “invariants” (Gibson), “typical contours” (Deregowski), etc. This paper critically reviews the literature on the subject of figure recognition, taking the discussion in a new direction, and one which includes neurophysiological considerations. (Paper)

Eve Ewing

Birds of Rain and Other Avian Forms in Great Mural Art of Baja California

Birds have long played important symbolic roles in the beliefs of native cultures. This presentation will focus on some examples from the rock art that appear to portray birds as bringers of rain, birds as messengers and birds as transformation motifs. (Paper)

Leanna Flaherty (California State University, Chico)

The “Costliness” of Petroglyph Manufacture: An Experiment Conducted to Determine the Energy Expenditure of Rock Art Production and an Evaluation of its Potential as a “Signal”

This paper explores the energetics associated with petroglyph manufacture to address the question of whether some rock art imagery can be understood as evidence of prehistoric peoples participating in costly signaling or “show-off” behavior. One condition of Costly Signaling Theory is that signaling must have some sort of disadvantage in order to maintain its “honesty”. Drawing on the basic principles of exercise physiology, an experiment was conducted using open-circuit indirect calorimetry to determine the energetic expenditure of rock art production, the results of which are compared to other activities in order to evaluate its potential as a costly signal. (Paper)

Steve Freers (Independent Researcher)

Southern California Style—It’s Elemental

There are three identified painted rock art styles in southern California, each with its own set of defining characteristics and geographic distribution. The extent of the La Rumorosa Style agrees strongly with the Kumeyaay cultural map. However, the geographic distribution of the San Luis Rey and Rancho Bernardo Styles spans several cultural groups. The purpose of this investigation is to explore the idiosyncratic variances within these rock art styles that mirror conventional assumptions regarding ethnographic divisions. (Paper)

Kathy Hamlet and Carolynne Merrell (Archaeographics)

Cowboys with Time on their Hands

Cattle and sheep ranching dominated much of southern Idaho from 1866 to the mid 1900s. With it came the cowboy, who tended cattle on land that was previously home to tribes of Shoshone, Bannock, and Paiute Indians. The cowboys left their marks by incising brands and other art on boulders and rocks at the same location as prehistoric rock art. The fact that these engravings did not appear as graffiti over the obvious Native American rock art suggests a respect for the earlier art while at the same time contributing cowboy related images to the landscape. (Report)

Don Hann (Malheur National Forest)

Searching for the Story in Picture Gorge, Eastern Oregon

Picture Gorge in eastern Oregon contains one of the largest concentrations of pictographs in the state. Site 35GR12 stands out in the number and complexity of designs. There are several paired images related to distinctive geologic features. Although in clear association with each other, the images do not show the formal attributes to be identified as a scene or a true narrative. Formal and informed analysis of the images suggests they still tell a story, an implied narrative. By weaving

together strands of evidence from Columbia Plateau history, ethnography, archaeology and mythology the broad outline of a story is presented. (Paper)

Jon Harman (DStretch)

Abstract Pictograph Sites near Mission San Borja, Baja California

Mission San Borja lies at the southern limit of what Ritter and Ewing have called the Northern Abstract rock art zone in Baja California. This paper documents three pictograph sites: Las Tinajitas and two sites near Rancho Viejo San Gregorio. All are within 10km of San Borja. Las Tinajitas has been mentioned in the literature. The other two sites have not been reported previously. Many of the paintings at these sites are faded and some are very difficult to see. DStretch enhancement technology is used to help visualize the paintings at these sites. (Paper)

Ken Hedges (Independent Researcher)

Red Rock Canyon: Investigating the Sinagua Connection in Lower Gila Rock Art

Red Rock Canyon is a unique petroglyph site located in a small sandstone canyon a short distance west of the Gila River between Gillespie Dam and Gila Bend in southwestern Arizona. Design elements form a distinctive set unlike those in surrounding rock art of the Hohokam Gila Petroglyph style or the Patayan Sears Point style. Certain historic motifs suggest a late Patayan connection, but the site in general resembles rock art from the Sinagua area to the north, and may provide explanations for unusual aspects of certain lower Gila sites. (Paper)

Janine Hernbrode (Volunteer, Coronado National Forest and Arizona Site Stewards)

Gender in Hohokam Imagery and Landscape: Sutherland Wash Rock Art District, Coronado National Forest, Arizona

Hohokam anthropomorphs in Tucson area rock art have been characterized as having little detail and rare indications of female gender. New information from 28 sites in the Sutherland Wash Rock Art District and the completion of comprehensive recording has given us an opportunity to compare 419 anthropomorphs, of which 134 (32%) were clearly gendered in approximately equal numbers, either male or female. Apparent attempts to illustrate “family” and “birthing” also are pictured repeatedly. In addition, the site includes a granitic landscape with natural yoni and phallus formations and boulders with a large number of cupules. (Paper)

Jennifer Huang (Bureau of Reclamation), Robert Mark, Evelyn Billo, and Jannie Loubser

Experimentation with iPad 2 Technology in Petroglyph Documentation at the Watson Site, Southeastern Oregon

In 2011, the Bureau of Reclamation contracted with Stratum Unlimited and Rupestrian CyberServices to complete documentation of an extensive petroglyph site in southeastern Oregon. Recording of this site began in 2002, but only half was completed because of its immense area and density. The contract specifies the use of iPad 2 technology in the recording process to test its usefulness in the field. This paper outlines the history of recording techniques at this site, the experiences using iPad 2 units, and the plan to study the resulting data to determine the full significance of this enormous Great Basin site. (Paper)

Boma Johnson (Bureau of Land Management, Arizona; Retired)

Rock Art of the St. George Basin, SW Utah: An Overview

This presentation has two purposes. First will be a quick visual visit to some of the more interesting rock art sites in the St. George Basin. Secondly will be a short examination of a few outstanding story/song panels created and used by the Virgin Anasazi and Paiute as initiation or teaching stations. These panels express core concepts and beliefs as held by southwest Utah and other Southwestern tribal peoples, and as shared with the author over the years. (Paper)

James D. Keyser, Livio Dobrez, Don Hann, and David A. Kaiser (Indigenous Cultures Preservation Society)

When is a Picture a Narrative? Interpreting Different Types of Rock Art

The concept of narrative in rock art is widely used, even though often poorly defined. The result is that single images, where the “story” lies solely with the observer are equated with complex scenes, involving multiple actors engaged with each other and with inanimate objects by complex “story-telling” conventions. In between these opposites are rock art compositions whose story is suggested by factors evident both in the art and in the site setting. We describe and define three expressions of narrativity—explicit, implied, and inferred—that rock art scholars can use to differentiate these three types of rock art. (Paper)

David Lee (Western Rock Art Research)

A Decade of Documentation: Current Status of the Owens Valley Rock Art Project

The “Deepest Valley” in America is located between two 14,000 foot mountain ranges in California, and has been home to Native Americans for over 10,000 years. The archaeological resources here are rich and varied; from village sites to rock

art sites ranging from one to a thousand elements. Western Rock Art Research has been collaborating with the Bureau of Land Management since 2000 to document these resources as a first step towards effective management, and in an effort to understand these enigmatic images. The status of the project will be presented along with some of the trends that are emerging. (Report)

Janet Lever-Wood and Ann Phillips (Bureau of Land Management)

Rock Art Recording at Upper Sand Island, Utah

A summary of the rock art recording project at Upper Sand Island, Bluff, Utah will be presented. New photographic technology, a remarkable crew of volunteers, and excellence in cooperative documentation will be emphasized. The rock art at this site ranges from paleolithic images to proto-historic narratives. (Report)

Lawrence Loendorf (Sacred Sites Research)

The Horned Headgear Site, Montana

Horned Headgear, 24ML0508, is located on the Musselshell River in central Montana. The site is relatively small with six panels, but two of these exhibit an important story about a battle between an Assiniboine warrior and a Crow warrior. The site is significant for the quality of the imagery but more importantly it is an example of a rock art site that can be assigned to specific tribal groups. Archaeologists try to establish ethnicity for past remains and the Horned Headgear site is an example of how researchers can use rock art to identify tribal affiliation. (Paper)

Chris R. Loendorf and Lawrence L. Loendorf (Gila River Indian Community, Sacred Sites Research)

Analyzing Red Pictographs with Portable X-Ray Fluorescence

Portable X-Ray Fluorescence (PXRF) is one of the few analytical techniques that allows in situ and non-destructive assessment of pigments used in pictographs. Previous research with this technique has successfully identified minerals in rock paintings of different colors including red (iron) and green (chromium). In our recent PXRF analysis of paintings at Picture Cave, Texas, we were also able to establish that at least two different batches of paint were used at the site. This compositional variation allows previously unavailable insight into the associations among different figures at the site. (Paper)

Farrel W. Lytle (The EXAFS Company)

Determining Age of Petroglyphs by XRF Chemical Analysis: Dated Petroglyph Frequency Tracks Climate Eras

Petroglyph age was measured by XRF chemical analysis. Age calibration based upon DV manganese concentration (corrected for base rock content and slope) vs. the cosmogenic-isotope-dated age. Range and 1 sigma accuracy were XRF vs. Age from 1,000 to 40,000 +/- 25% years BP. Accuracy on basalt, tuff and sandstone agreed with known ages. Glyph ages agreed with subject archaeological context, e. g. bow and arrow vs. atlatl. Dated glyph frequency peaks and valleys from extended sites correlated with wet and dry climate eras. Demonstrated for Anasazi Ridge and Little Creek. (Poster)

Scott McDonald (McDonald Geologic)

Multiple Use Paleoarchaic Sacred Sites, Pancake Range, East Central Nevada

Five spaced-stone geoglyphs are found in three sites in the Pancake Range of Nevada: The Circle Site, a pink volcanic boulder surrounded by stones. The Snake Site, a large snake-human conflation figure with two short entopic lines nearby. And the Hero Site: a figure of a human or star constellation. These sites may have had disparate and multiple uses. Puberty initiation, hunting magic, shamanic initiation and hero myth may have united these nearby sites in a pilgrimage journey of religious and political significance. (Report)

Carolynne Merrell (Archaeographics)

Exploring the Cave Valley Style, Utah

Cave Valley is a distinct style of rock art thought to have had its genesis in a cave located in Zion National Park. It is best described as a humanoid figure constructed from six interconnected triangles. Variations on this theme include head adornments, more naturalistic appendages, and other body decoration. Little is known about the distribution of this style element or its possible cultural affiliation. Recent research leads to a better understanding of this design element, its variations, cultural affiliation and geographic distribution. (Paper)

Elanie Moore (Citrus College)

At Cueva Pintada, Baja California Sur, the Proof is in the Pole

This paper revisits the mystery of painting the upper images, some as high as 35 feet above the floor of this ancient cave, La Pintada, found in the Sierra de San Francisco, B.C.S., Mexico. After experimenting with a variety of natural poles that grow

in the canyons nearby, trying other researchers' ideas, and taking into account the physical properties of painting with a 'brush', Carrizo Phragmites is the most likely instrument used for mural production. (Paper)

Ruth Musser-Lopez (Archaeological Heritage Association, River Branch)

The Mountain North of Las Vegas: Rock Art Style Distribution on the Periphery of the Sheep Range

Five rock art sites, ranging widely in motif style, potential function, and age are also widely dispersed physically along the periphery of the Sheep Range north of Las Vegas. A model for distinguishing the motifs of Uto-Aztecan speakers from motifs likely made by Hokan speakers is utilized. A tentative age range is assigned employing the strategy proposed by Gilreath for associating Gold Butte stylistic motifs with age. Images are also compared against the absolute chronological framework for six motifs established for Coso Range rock art by Rogers (2010). (Paper)

V. Garth Norman (ARCON Inc.)

Parowan Gap Narrows Rock Writing as History: Interpretation in Archaeological District Contexts

The Parowan Gap, Utah, archaeological project (1993 to 2007) took the rich Gap rock art archive research to new levels for constructing Fremont history with a multi-disciplinary research design. Tasks including site survey, excavation, rock art analysis, ethnology, archaeoastronomy survey, and site comparisons, maximized interpretive data. Research results identified a massive calendar observatory with over 25 horizon/sun watch stations, corresponding petroglyph shadow marks, and extensive petroglyph calendar numeral records, all centered on the 260-day calendar. Discovery of distant contacts with turquoise trade introduced Mesoamerican Toltec culture that moved Parowan Fremont village life on the path toward higher civilization. (Paper and Poster)

Jon Picciuolo

Pictographs at Swordfish Cave (CA-SBA-503) Suggestive of Human-Swordfish Shamanistic Transformation

Two small pictographs at Vandenberg Air Force Base's Swordfish Cave seem to display a mixture of human and swordfish characteristics, possibly suggesting shamanistic transformation. The poster presents the two pictographs and the site's famous swordfish, pointing out human and swordfish characteristics of the two featured pictographs. A very brief discussion of the swordfish's cultural significance to the Chumash is included. No assertion is made that the two pictographs indeed represent shamanistic transformation; however, their apparent mixture of human and swordfish characteristics is intriguing. (Poster)

Alexander K. Rogers (Maturango Museum)

Early Reports on the Coso Petroglyphs of Southern Inyo County, California.

The Maturango Museum, in Ridgecrest, California, holds in its files what appears to be the earliest academic report on the Coso petroglyphs. The report was prepared for the US Navy in 1946 by Virginia Hitchcock, a student of Robert Heizer at the University of California. The report is type-written, in memorandum format, and includes Polaroid photographs of the rock art. In addition, the Museum recently received photographs and a typewritten narrative from a visit to Lower Renegade Canyon in 1923 by a man named Herb Summers. This paper will present the photographs and briefly summarize these two reports. (Report)

Bruce Ross

Traveling to Other Worlds: Visitation to the Heavens as Transpersonal Experience in Rock Art

Relying on a model of entoptic behavior, the paper examines the transpersonal experience of traveling to the "heavens" as expressed in world rock art. The most common direction of a shaman's passage to the other worlds is to the "upper" one. Representations of this passage are sometimes representational (a human figure connected by a line to an object in the sky) but more often metaphoric expression (lines arched around a human figure's head). Examples are presented from worldwide rock art, areas (including the "Wedding Rocks" of coastal Washington and several sites in Morocco). (Paper)

John A. Ruskamp (Epigraphic Research, AAS-Little Colorado Chapter)

Asiatic Echoes: The Identification of Chinese Pictograms in North American Rock Writing

This paper introduces pictorial and written evidence that in pre-Columbian times, multiple intellectual exchanges took place between Asiatic and North American populations. Using a novel integration of the legal construct of substantial similarity with the comparative statistical tool of Jaccard's Index of Similarity, the Chinese origin of 24 North American petroglyphs is established. Analytical comparative statistics are provided for the similarities shared by studying glyph line-strokes with corresponding features of equally ancient and complex Chinese script pictograms. Here is epigraphic proof that Asiatic explorers interacted positively with Native North American people long before any European exploration of the continent. (Paper)

Gerri Schrab (Rock Art in Watercolors)

Addressing the Sacred: An Artistic Exploration of Rock Art

Rock art sites are often referred to as sacred. What exactly makes a site sacred? Going beyond transits or tape measures into a human region that can only be measured by the beat of the heart, artistic exploration shifts the sacred from intellectual concept to modern practice. This presentation explores that mystery veil through a personal and expressive paint on paper approach to rock art sites in the upper Midwest, the Boundary Waters of northern Minnesota and greater Lake Superior region. (Report)

Scott Seibel

New Rock Art Discoveries on Fajada Butte, Chaco Culture National Historical Park

As part of the ongoing Chaco Canyon Rock Art Reassessment Project, detailed rock-art site recording was done on Fajada Butte in the Spring and Fall of 2011. Previously unknown rock-art galleries were discovered, including panels found in an area inaccessible without technical mountaineering assistance. This presentation describes the new discoveries and describes the technical challenges in recording these difficult-to-reach areas. (Paper)

Karen L. Steelman, Lennon N. Bates, and Carolyn E. Boyd (University of Central Arkansas)

Radiocarbon Dating a Rock Painting from Black Cave, Texas

A Pecos River Style image from Black Cave (41VV76) was radiocarbon dated using plasma oxidation and accelerator mass spectrometry. The date was obtained from a paint sample from an image of a black deer impaled by a red spear. We obtained an age of 1465 ± 40 years BP. Although many radiocarbon dates have been obtained for rock art in the Lower Pecos River Region of southwest Texas, detailed stylistic information for these dates is unknown. This younger result for the Pecos River Style suggests that additional dating studies are needed. (Paper)

Michael Terlep (Northern Arizona University/ Grand Staircase-Escalante National Monument)

A Multifaceted Analysis of Cup and Channel Petroglyphs from the Arizona Strip

This paper examines the spatial distribution and stylistic variability of cup and channel petroglyphs from the Arizona Strip. The age, origin, and function of these enigmatic petroglyphs have fascinated archaeologists for decades. The petroglyph size, up to 2 m long, and placement at prominent points contributes to the intrigue of cup and channel glyphs. Previous hypotheses for the age and function of the petroglyphs include prehistoric navigational markers to water sources, solstice markers, and historic tar burners. Using geographical information systems and archaeological and landscape methods I argue the petroglyphs are prehistoric water channels dating to the early/mid Formative period. (Paper)

Elizabeth (Beth) Velliky (Simon Fraser University)

Rock Paintings of Squamish Valley: An Analysis of Pigments and Ochre Sources using Portable X-ray Fluorescence Spectrometry

There are two known sources of red ochre in the Squamish Valley, B.C., which were likely utilized in the creation of numerous pictographs in the area. The aim of this project is to geochemically analyze the sources in Squamish and other sources from within and outside British Columbia, and to analyze the pigments in the Squamish rock paintings using Portable X-ray Fluorescence Spectrometry (PXRF). The results of this research will show if PXRF can confirm the provenance postulated for ochres, and if it is possible to attribute mineral pigments used in rock paintings to their origins using this methodology. (Paper)

Steven J. Waller (Rock Art Acoustics)

Illusions of the Supernatural: Archaeological Remnants of Pre-Scientific Paradigms Attempting to Explain Ambiguous Audio/Visual Phenomena in the Landscape

Pre-scientific peoples did not possess accurate theoretical models of complex natural phenomena. E.g., sound wave reflection gives the illusion of a virtual source behind the reflecting surface, and was modeled as answers emanating from non-corporeal beings dwelling within the rocks, as attested by ancient myths of echo spirits. Audio measurements reveal that cave art was often placed at locations with particularly intense reverberation that mimics thunder. A wide variety of other illusions can originate from ambiguous natural phenomena (light/shadow interactions, etc.). In the absence of scientific knowledge these inexplicable phenomena were considered supernatural, evoking spiritual responses in the landscape. (Paper)

Bill Whitehead

Why We Will Never Be Able to Interpret Rock Art or Anything Else For That Matter, Part 3

Part 3 implies a part 2, which may or may not exist. This will be a continuation of last year's paper, musing on rock art interpretation, including a plea for assistance interpreting some modern rock art. (Paper)

DAS Welcomes ARARA 2012

By John Mangels
President, Dixie Archaeology Society

As president of the Dixie Archaeology Society, I welcome you to scenic St. George.

St. George is truly a unique location. It is located at the confluence of three separate geological regions, the Mojave Desert, the Great Basin, and the Colorado Plateau, with the Santa Clara and Virgin rivers bisecting the area. This diverse geology creates the diversity of flora and fauna observed in the area. The geological past is what has created the magnificent and diverse scenery of the area, the deserts, the mountains, the canyons, and the red rocks!

The archaeology of the St. George area dates to Paleoin dian/Archaic periods with many Basketmaker sites predating the Virgin Branch Ancestral Puebloan sites.

This diversity of geography and archaeology is represented in the rock art of the area. You have a chance to view this variety in the field trips offered. You will observe the stylistic changes from Lincoln County, Nevada, in the northwest, to the Gold Butte area in the Southwest, to the Colorado Plateau in the east, and the Arizona Strip in the south and southeast, with St. George in the middle. You will see rock art from the Archaic period to the Ancestral Puebloan and Paiute periods.

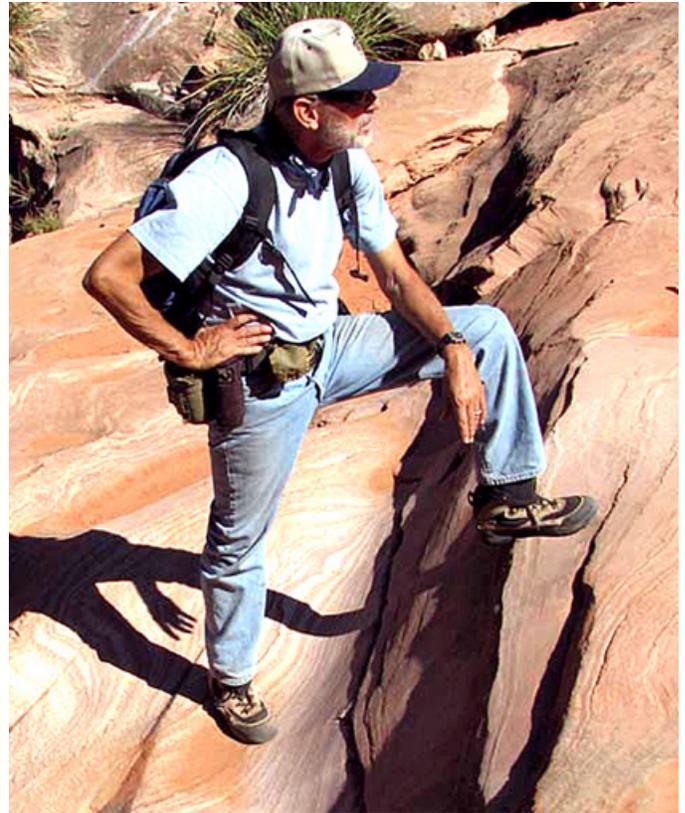
The Dixie Archaeology Society has documented many of the sites offered in the field trip program which may be viewed at www.dixierockart.webs.com. We have also summarized many of the technical lectures given to the society that detail rock art, archaeology, and Native cultures of the area on our web site. This site is updated monthly and can serve as a reference regarding the rock art of the area.

I know you all (or most of you) have lives outside of rock art. I encourage you to view the beautiful scenery of the area, and did I mention the red rocks. Snow Canyon State Park is a one-half-hour drive from the hotel and is one of the most popular state parks in Utah. Zion National Park is a one-hour drive and is a must see—2.5 million visitors per year can't be wrong! The north rim of the Grand Canyon, Bryce Canyon National Park, and Lake Powell are all three-hour drives. St. George is called the Gateway to the National Parks. And if you want to relax after your hectic time in St. George, Las Vegas is only a two-hour drive.

I hope you enjoy your time in St. George and enjoy your desert experience. However, to fully enjoy your time, you must always be aware of the temperature and ALWAYS drink plenty of water. Locals will always have water with them.

...continued on next page

Banquet Keynote Speaker 1,000 Sites and Counting



THE featured speaker for this year's banquet is Don Christensen. His documentation of and publications on rock art throughout the American Southwest and southern California are well known. This presentation will be a personal reflection on the experiences gained through fieldwork, community outreach, and the publication process. It will also touch on one man's perspective of the state of rock art research in the 21st century. The focus will mainly be on the lessons learned on the Arizona Strip, with its complex cultural history and challenging physical environment.

Don has a B.A. in History and an M.A. in Education. He has now retired after 34 years in public education as a social science instructor and a cross-country and track coach. He is currently a Research Associate with Western Rock Art Research, a nonprofit organization. He has 21 years of survey and excavation experience with a number of cultural resource management firms in California and with the Western Archeological and Conservation Center in Tucson, Arizona. He has documented rock art for over 37 years in California, Nevada, Utah, and Arizona for the Bureau of Land Management, the National Park Service, and the U.S. Forest Service. He is the author and coauthor of numerous rock art articles in a variety of publications. 

Keepers of the Gate - 2012

THE recipients of the 2012 Keepers of the Gate Award are Dorothy and Gordon Zitting, owners of the Quail Creek Ranch. They were nominated by our local hosts, the Dixie Archaeology Society.

The Quail Creek Ranch is located at the junction of Quail Creek and Virgin River, and holds a number of important Archaic and Ancestral Puebloan rock art panels. The ranch is surrounded by subdivisions and is adjacent to a major Utah highway, Route 9.

The Quail Creek Ranch with its fencing and secure gates forms a protective barrier to keep the general population away from the rock art panels. However, the Zittings do allow groups of people such as the Dixie Archaeology Society, the Utah Rock Art Research Association (URARA), ARARA, and others access to their property to view and study the rock art. As such, the rock art at Quail Creek Ranch is in good condition and does not suffer the vandalism that has damaged some rock art panels in the area.

Congratulations to this year's award recipients!

Examples of the rock art found on Quail Creek Ranch have been described by Kenneth Castleton in his book, *Petroglyphs and Pictographs of Utah, Volume 2, Utah Museum of Natural History, 1987*, on pages 122-125. He refers to the site as Harrisburg Creek. 



Quail Creek Ranch, Site 2

(*photograph courtesy of the Dixie Archaeological Society*).

ARARA 2012... *continued from page 12*

Please ask any of the Dixie Archaeology Society Volunteers for assistance with your questions regarding St. George or the surrounding area.

Enjoy St. George! 

Conservation Awardees - 2012

THIS year, ARARA's Conservation Award goes equally to the St. George Field Office of the BLM, the City of Ivins, Utah, and the City of Santa Clara, Utah, for their cooperative creation of the Santa Clara River Reserve.

The Santa Clara River Reserve is the outcome of a cooperative agreement between the St. George District Field Office of BLM and the cities of St. George, Santa Clara, and Ivins, Utah. The Santa Clara River Reserve protects Anasazi Ridge petroglyphs, the Santa Clara Canyon petroglyphs, and a variety of excavated and unexcavated archaeological sites along the Santa Clara River and above it on what is called "Anasazi Ridge." The Santa Clara River Reserve protects not only important archaeological sites but also important biological resources in an expansive area that is now subject to use restrictions.



Santa Clara Canyon

(*photograph courtesy of the Dixie Archaeological Society*).

Important petroglyph sites have now been fenced, an ADA-accessible trail has been constructed, interpretive signs are provided, and parking lots have been paved.

Prior to protection, this area was subject to dumping, partying, and uncontrolled access that made it possible to drive up to (or over) archaeological sites and didn't impede vandalism. Up until a few years ago, the directions to one petroglyph site was "go to the large boulder past the rusted cars and the white washing machine."

Specific information about the Santa Clara River Reserve, its formation, the partnership between the cities and BLM, and the results of this collaboration can be found at: http://www.blm.gov/ut/st/en/fo/st__george/blm_special_areas/santa_clara_river.html

Examples of the rock art found on the Santa Clara River Reserve have been described by Kenneth Castleton in his

...continued on next page

Conservation...

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A panel at Anasazi Ridge (photograph courtesy of the Dixie Archaeological Society).

For information on one interpretation of this panel, go to:

<http://dixierockart.webs.com/Technical%20Presentations/Tales%20from%20the%20Ridge.pdf>

book, *Petroglyphs and Pictographs of Utah, Volume 2, Utah Museum of Natural History, 1987*. He refers to the Santa Clara Canyon site as “Santa Clara River,” and it is described

on pages 140-143. He refers to the Anasazi Ridge site as “Three Mile—Santa Clara,” and it is described on pages 143-147. ☉

IFRAO 2013 Report

By Peggy Whitehead

THE web site is up! ifrao2013.org is the official conference web site. The individual Call for Papers is posted there as are all accepted thematic sessions. If your research topic fits within one of the session themes, please contact the Session Chair about joining them. Their contact information is included with the session abstract. If your topic is not found within the thematic sessions, please submit it as an individual contribution to the general Program Chair. Also posted on the web page is a draft schedule for the week of the conference; this will be updated as more details become available. The hotel where the oral and poster presentations and reception will be held is linked to the web page for your ease in making a reservation. It is great to be in one location. No matter where you are—an elevator, the exercise room, or at the well-stocked bar—there are people with the same interests. Conversations on the latest research and techniques for recording abound.

IFRAO 2013 is also on Facebook. It is an open site, so you can visit us whether or not you are a facebook member by

visiting www.facebook.com/Ifrao2013. However, to post to the page, you do need to join Facebook. The individual Call for Papers is posted there, and we will be posting much more conference information there. Conversations regarding the conference are encouraged, and if you have a question about the conference that needs attention, please post that there also for a quick response.

In Albuquerque, New Mexico, there will be only one day of Conference Sponsored field trips (Wednesday, May 29, 2013). Attendees will receive field trip information after they register. The selection of which to site visit will be made on a first-come basis. As field trips fill, they will be dropped from the list sent to new registrants. Thus, the earlier you register, the better your chances are for visiting the site of your choice. The web site has the registration form to download and fill out. You then have the choice of email or regular mail to complete the process. Pre-conference and post-conference field trips are being offered to attendees by Tour New Mexico and by Destination Southwest. These companies also have trips that

...continued on next page

Upper Sand Island Recording Project Completed

By Pamela Baker

THE Fuels Shop of the Canyon Country BLM in Moab, Utah, URARA, and the Monticello BLM Field Office recently collaborated to record the rock art at Upper Sand Island. Many members of ARARA also participated. The 0.6-mile-long cliff face was exposed to increased visitation when the Fuels Shop removed the tamarisk and Russian olive on the floodplain in the area in front of the panels. The BLM provided professional support, a group campground at Sand Island for the volunteers, indoor space during the fieldwork sessions, and miscellaneous supplies. URARA provided a grant to cover costs of direct expenses such as photography, printing, mylar, pens, and scanning of images.

Ann Phillips and Leigh Grench (BLM Fuels Archaeologist) led the project, assisted by a four-member team: Pamela and Quentin Baker, Janet Lever-Wood, and Dave Manley. It was, however, the serious commitment and devotion on the part of Ann Phillips which inspired and motivated the project. The entire team spent weekends in January and February and then a week in March preparing for the volunteer drawers to join them for a week in April. During the April session which included over 30 volunteers from seven states, Dell Crandall and Claudia Berner acted as campground hosts. Several local professional archaeologists also joined the recording effort. Elaine Holmes and Anne McConnell anchored the office and kept up with data entry.



Preparing for the Upper Sand Island Project. Dave Manley by the tripod, Quentin Baker under the hood with the computer, and Janet Lever-Wood to the right (photograph by Pamela Baker).

IFRAO 2013... *continued from page 14*

your non-rock art enthusiast traveling partner can participate in during the week of the conference while you are attending papers, panels, and posters. See the IFRAO2013.org web site for links to these companies and their schedule of events.

New Mexico is rich in images, and ideally we want everyone to see all of the sites. But that is not reality. Most sites have a limit of less than 25 people per day, but there are some great public access rock art sites that can accommodate more visitors, such as Petroglyph National Monument and Bandelier National Monument. Thus, a trip to IFRAO 2013

will present many opportunities to visit rock art in both the private and public sector, and we encourage you to make your plans to attend this international event.

If you do not have email and wish to have a copy of the registration form mailed, please contact:

Donna Yoder <donnayoder@cox.net>

IFRAO 2013 Registrar

2533 W. Calle Genova

Tucson, AZ 85745-2526 USA 

The Editor's Corner

A Visit to Loltún

IN recent years, the Riviera Maya has become an ever more popular tourist destination—especially for Americans. Although the beaches and bars of Cancun and Playa del Carmen are usually the main attraction, archaeological tourism adds variety to any stay, and Maya sites like Uxmal, Tulum and Chichen Itza are now big draws. On the day of my most recent visit to Tulum during Mexican Holy Week break this year, about four times as many people filed through the turnstile as ever lived inside the walls of this rather modest Post Classic site. (Ah, but the beach nearby is beautiful!)

Other important sites have emerged from obscurity due to recent archaeological work, like Ek Balam, just north of Valladolid, with its spectacular full-figure statues in stucco, and Cobá, spread around the shores of a lovely lagoon—and so close to the beaches too! Still other sites are rarely visited—a little off of the beaten path and sometimes lost like solitary phantoms in the forest. Some contain jewels of Maya

architecture, like Labna—whose classic Maya Arch gateway was drawn by Frederic Catherwood in the 1840s—where we had the site all to ourselves.

The karstic limestone landscape of the Yucatan peninsula is not too favorable for rock art and most of it is hidden underground. Several cave sites in the Puuc region have rock art, but Loltún cavern, near the town of Oxkutzcab, is the most famous and the only site managed for tourism. I first heard about it from Matthias Strecker, who documented the rock art there in the 1970s. This trip I finally got to see it myself. About 35 people were along for the mile-long guided walk through the spectacular chambers of this very active cave.

The cave consists of large irregular limestone blocks which have collapsed into a series of interconnected open caverns of varying size. Pools of water fill the lowest parts and some stalactites have rock basins underneath fashioned by earlier inhabitants to catch the drip water. The rocks were slippery and the path and stairways included some steep climbs. In one room, two huge stalagmite columns send out distinctive tones when struck, which, according to our guide, sound out the name of the place: Lol-tun. On the wall just behind are



Cavern within Loltún Cave (photograph by Nahum Solís Davila).

Loltún... *continued from page 16*



*Handprints in Loltún Cave Cave
(photograph by Nahum Solís Davila).*

the negative handprints in black which are one of the most prominent motifs inside this and other caves in the region.

The most spectacular (and distinctive) rock art, however, is outside at the entrance to the cave. It is a monumental representation of a Maya personage elaborately sculpted in low relief and about 2.5 meters high. According to Linda Schele and Nicolas Grube's reconstruction of its inscription, it is the earliest dated monument in the Maya lowlands, somewhere in the range between 150 B.C. to A.D. 100. You will need Linda's drawing to see it well, however, as the carving is heavily obscured by shadows and black streaks in the parent rock.

The figure was first described by Teobert Maler in the 1880s, and its iconography has been an important object of study for Maya scholars ever since, usually under the rubric of Maya art and iconography. It immediately poses the question of the fine line between "rock art" and real "art." No matter how you define either term, in the Maya region (and elsewhere in Mesoamerica) there appears to be an unbroken continuity between the two. When does a petroglyph become a rock sculpture? Just what carving techniques and design details necessarily imply "artistic" intentions? When do mere dots and tallies become a part of calendrical inscriptions? I think the Loltún figure provides some guidance to these questions

and is itself an important testimony of this continuity.

There can be no question that the figure at Loltún is a rock sculpture made by professional artisans with special skills. Its placement, size, and orientation occupy a commanding position at the main Hunacab entrance to the cave, and its carving would have probably have required ladders or scaffolding of some kind as well as many man-hours of labor. The complexity of its motifs is similar to other Maya aesthetic expressions and directly comparable to later Maya stela monuments. It is in fact an outstanding example of early Maya art.

One perceives its rock art connection only when you place it within the wider landscape. The cave entrance is large and lies in the middle of an otherwise featureless and waterless plateau. It leads to an underworld of water and capricious rock formations whose natural darkness contrasts dramatically with the sunlit aperture in its largest chamber. At the end of the trail you reach a truly magical space with constantly changing light conditions and green vegetation sheltered in the middle. Although it was mainly in shadow when I visited, the aperture provided enough light to see a more diverse repertoire of petroglyphs on its most accessible side wall—geometric shapes and schematic human faces left by earlier visitors who reached this same world apart. Nowadays, these images are scarcely visible to the casual visitor; you have to know where they are or you would miss them entirely.

In fact, this magical world was probably discovered many thousands of years ago. In a section of the cave not accessible to the general public, archaeologists have found even earlier Archaic petroglyphs as well as other evidence of early postglacial human occupation at Loltún. This totally separate place hidden below the earth surface may have been a natural sanctuary or the destination of a pilgrimage, a refuge, or a trap, but it is also a purely rock world, shaped not by human hands—however skilled—but by the natural processes of erosion and water, sunlight, and humidity, and conditioned by air flows and living creatures. Its rock art is all just another part of this larger world.

So, in contrast to joining the many thousands who filed past a continuous row of vendors to visit the famous Cenote Sagrado at Chichen Itza, where (according to the guides) winsome Maya maidens were once sacrificed to the gods, I recommend Loltún Cave if you're heading to Yucatan, not just for the rock art but also for the opportunity to visit the still living Maya underworld. During his introductory prep talk, our local Maya guide heard the call of a particular tropical bird which correctly predicted that it would rain the following day. No Maya Apocalypse! No end of the world! The Maya and their culture are still alive! 

Call for Papers for *La Pintura*

ARARA members would love to read about your new rock art discovery, recording project, or new idea for interpretation. *La Pintura* needs members to submit articles on current research or fieldwork. Doing so will make *La Pintura* a better journal. Editorial guidelines can be found on the inside back cover of every issue.

Editorial Deadlines for *La Pintura*

To insure timely publication of each issue of *La Pintura*, please follow the following schedule of deadlines for all editorial copy and other submissions:

Issue 1: February 1

Issue 2: May 1

Issue 3: August 1

Issue 4: November 1

Send all materials for inclusion in *La Pintura* to:

William Breen Murray, Editor
WBMurray1@yahoo.com

International Newsletter on Rock Art

INORA — *The International Newsletter on Rock Art*, edited by Jean Clottes and published in French and English three times a year (February, June, November) — is available to ARARA members for \$25 a year. Subscribe through ARARA and save the \$10 French bank charge. The 32-page newsletter contains the latest international rock art news. To subscribe, send a check for \$25 **made out to ARARA** to:

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ARARA Addresses

ARARA has several addresses. To get the most timely response, please send your inquiry to the right place.

Membership

For **all Membership matters**, including new and renewal memberships (see full membership information on inside back cover), replacement of undelivered issues of *La Pintura*, and corrections or changes in membership information and addresses, contact:

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Postal mail for the *La Pintura* Editor may be sent to:

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Glendale, AZ 85308-2038

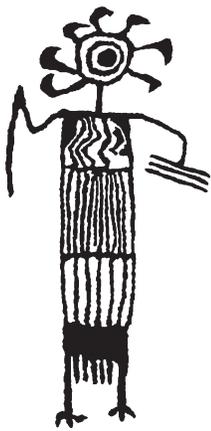
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The **American Rock Art Research Association** is a non-profit organization dedicated to encourage and to advance research in the field of rock art. Association members work for the protection and preservation of rock art sites through cooperative action with private landowners and appropriate state and federal agencies.

The **Association** strives to promote non-destructive utilization of rock art for scientific, educational, and artistic purposes. This is accomplished through a wide-ranging program to inform and educate the members as well as the general public regarding the rock art heritage of the United States as well as worldwide. These goals are communicated through the quarterly newsletter, *La Pintura*. Annual

three-day conferences give both members and others interested in rock art the opportunity to share professional papers, slide presentations, and informal discussions.

Membership in the **American Rock Art Research Association** is open to all with an active interest in research, non-destructive use, and preservation of rock art, regardless of their nationality or country of residence. Membership fees are:

Donor	\$120.00
Family	\$50.00
Individual	\$45.00
Society/Institution	\$60.00
Student	\$35.00

*Student rate requires photocopy of current student ID. Foreign members please add \$5.00 for Canada/Mexico, \$10 for other countries.

Membership runs from January 1 through December 31 of each year. The Association is concerned primarily with American rock art, but membership is international in scope. Benefits include *La Pintura*, one copy of *American Indian Rock Art* for the year, reduced conference fees, and current news in the field of rock art. More importantly, membership means a shared concern for the ongoing conservation and preservation of one of the most significant elements of our heritage. Send memberships to:

ARARA Membership
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The **American Rock Art Research Association** subscribes to the following Code of Ethics and enjoins its members, as a condition of membership, to abide by the standards of conduct stated herein.

1. All local, state, and national antiquities laws will be strictly adhered to by the membership of **ARARA**. Rock art research shall be subject to appropriate regulations and property access requirements.
2. All rock art recording shall be non-destructive with regard to the rock art itself and the associated archaeological remains which may be present. No artifacts shall be collected unless the work is done as part of a legally constituted program of archaeological survey or excavation.
3. No excavation shall be conducted unless the work is done as part of a legally constituted excavation project. Removal of soil shall not be undertaken for the sole purpose of exposing sub-surface rock art.
4. Potentially destructive recording and research procedures shall be undertaken only after careful consideration of any potential damage to the rock art site.
5. Using the name of the **American Rock Art Research Association**, the initials of **ARARA**, and/or the logos adopted by the **Association** and the identification of an individual as a member of **ARARA** are allowed only in conjunction with rock art projects undertaken in full accordance with accepted professional archaeological standards. The name **ARARA** may not be used for commercial purposes. While members may use their affiliation with **ARARA** for identification purposes, research projects may not be represented as having the sponsorship of **ARARA** without express approval of the Executive Committee.

The **ARARA** Code of Ethics, points 1 through 5, was adopted at the annual business meeting on May 24, 1987. The Code of Ethics was amended with the addition of the opening paragraph at the annual business meeting, May 28, 1988.

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e-mail: ARARABoard@gmail.com

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